GREENWorks

Ideas for a Cleaner Environment

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What to Do With Those Old Batteries

How many of us have a small stockpile of used batteries somewhere in our home? We save them because we want to do the right thing and dispose of them properly. The big question is, "What exactly are we supposed to do with them?" While our goal is simple, the process can be a little different depending on the resources that are available and your town's policy.

Why We Recycle

Batteries can contain toxic components; mercury, lithium, lead and various acids just to name a few. These toxins may work their way into the environment if improperly disposed of, which could result in groundwater/drinking water contamination.

Understanding Batteries

Let's start by looking at the different types of batteries you might have in your home. Most residential batteries fall into one of three categories: Wet Cell, Dry Cell and Button Cell.

Wet Cell Batteries

Wet cell batteries (commonly referred to as lead-acid batteries) are comprised of a reservoir of acid and toxic metals (usually lead). These are the batteries found in cars, boats and other motorized vehicles. They recharge quickly and are more resistant to extreme temperatures than other batteries.

Dry Cell Batteries

Dry cell batteries can be either rechargeable or non-rechargeable.

Rechargeable dry cell batteries come in many types including Nickel-Metal Hydride, Nickel Cadmium and Lithium Ion. They are used in toys, power tools, phones and hybrid cars, and are favored in these devices due to their extreme durability.

Non-rechargeable dry cell batteries come in two forms; alkaline and lithium. Alkaline batteries are the batteries we commonly used before rechargeable batteries were available. Alkaline batteries are comprised mainly of zinc and magnesium. In the United States all added toxins were eliminated from alkaline batteries in the mid-1990s. They are safe to place in the garbage. Please read the section below titled "Safe Disposal."

Lithium batteries, or Non-rechargeable Lithiums are extremely flammable and react violently when they get wet. They have been linked to fires in homes and vehicles as well as severe injury due to ingestion by pets and children. All lithium batteries (new or depleted) are considered hazardous and should be handled and disposed of as such. Please read the section below titled "Safe Disposal."

Button Cell Batteries

Button cells are small disc-shaped batteries found in watches, hearing aids and novelty items. While some button cells are safe to throw away, many of them contain mercury or lithium and require proper disposal. The

information required to determine if a button cell battery is hazardous or not is quite often found only on the original packaging. Please see the chart to help determine what should be done with the various types of button cell batteries.

Safe Disposal

Even spent batteries are capable of heating up and causing fires. To prevent fires at homes and at local disposal facilities always cover the ends of your batteries with insulated tape to prevent accidental fires. Electrical tape and duct tape work best. Leaving batteries in their original packaging until ready to use will also help protect your home from fires.

Disposal Options for Batteries

Type of Battery		Disposal Options
Wet Cell		
	Lead Acid	Bring to your municipal recycling facility (if available) or bring it to a scrap metal dealer. You can also pay a retailer a nominal fee to recycle your lead acid batteries or you might be able to turn in an old battery with the purchase of a new one.
Dry Cell - Rechargeable		
	Nickel Metal Hydride (NiMH)	Bring to your municipal recycling facility (if available) or Recycle for free through several on-line recyclers. Contact your town to see if they have a collection point in town.
	Nickel Cadmium (NiCd)	Bring to your municipal recycling facility (if available) or Recycle for free through several on-line recyclers. Contact your town to see if they have a collection point in town.
	Lithium Ion Li-ion)	Bring to your municipal recycling facility (if available) or Recycle for free through several on-line recyclers. Contact your town to see if they have a collection point in town.
Dry Cell - Non-rechargeable		
	Alkaline	Safe to throw away.
	Lithium	Hazardous Disposal - Contact your municipal solid waste facility or save for Household Hazardous Waste Disposal Event.
Button Cell Batteries		
	Zinc-Air	Safe to throw away.
	Copper Oxide	Safe to throw away.
	Mercury Oxide	Hazardous Disposal - Contact your municipal solid waste facility or save for Household Hazardous Waste Disposal Event.
	Lithium	Hazardous Disposal - Contact your municipal solid waste facility or save for Household Hazardous Waste Disposal Event.
	Magnesium Oxide	Hazardous Disposal - Contact your municipal solid waste facility or save for Household Hazardous Waste Disposal Event.
	Silver Oxide	Safe for home owner to throw away. Commercial businesses must conduct a toxicity characteristic leaching procedure test before disposal.

For more information contact the NHDES Household Hazardous Waste Program at (603) 271-2407.